

Jumping worms in Connecticut

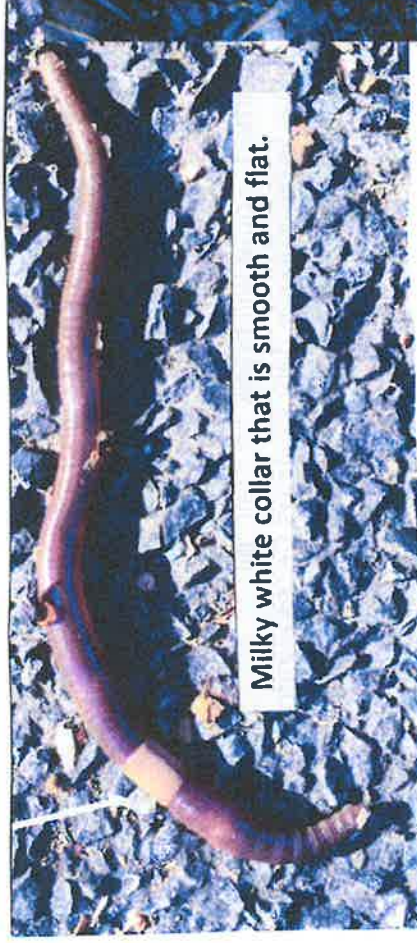
While preventing bringing in these cocoons/worms to one's yard is a priority, it is also very important not to introduce jumping worms into open space forests, natural areas, farms. They alter soil so native plants, deciduous trees cannot sprout or develop. This also negatively impacts the animals, insects, etc. that these plants support. Cocoons, the size and color of poppy seeds, have been brought unknowingly into residential yards in mulch, potted plants, compost.

Extracts below from The Connecticut Agricultural Experiment Station Fact Sheets, full version at: https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Fact_Sheets/Entomology/Jumping-worms-in-Connecticut.pdf

Distribution Jumping worms are established in the Midwestern states and are spreading throughout New England. They were introduced from Asia, principally from Japan. They are also called crazy worms, crazy snake worms, Georgia or Alabama jumpers, or Jersey wigglers. These are noticeably fast moving, highly active worms with a strong rigid muscular body that can whip violently when disturbed. These are earthworms on steroids! They can displace and outcompete other earthworm species. In their native range they are naturally controlled through predation. It is important to be educated about jumping worms and to educate and warn others.

[Jumping worms] destroy the organic (O) horizon, germination medium, natural seed banks and Mycorrhizalhyphal network [...] resulting in a collapse of understory vegetation. They destabilize the soil, increase nutrient leaching and erosion, increase drought vulnerability, cause turf detachment from soil and unstable rooting, root desiccation, and low germination.[...] Many native trees and plants (including garden plants) cannot germinate or develop in this altered soil, while invasive species thrive.

Jumping worms live for one year. They range from 1.5" to 8" (3.8 – 20.3cm) in length. In spring, juvenile worms hatch from overwintered cocoons the size [and color] of poppy seeds [invisible in soil / earth products]. Adults are active from July to October. They are killed by the first hard frosts. [Only adult worms have clitellums]



Dark worm castings possess a similar size and shape as Grape Nuts cereal.

how to differentiate [adult] Jumping Worms from nightcrawlers, Extracted from Penn State

Extension: If you examine the [adult] worms close-up, you will notice the prominent band around the body of the worm called the clitellum, where cocoons are produced. On a[n adult] jumping worm, the band completely encircles the body, is milky white to light gray, and is flush with the body. On nightcrawlers, the clitellum is raised and reddish-brown color and does not wrap entirely around the body.} Their castings (feces) are coarse, dark, and granular, similar in size and shape to Grape Nuts cereal.

Prevention on reverse

(extracts below from CT Agricultural Experiment Station Fact Sheets)

Prevention Buy plants with bare roots, not in pots. Jumping worms are being distributed in potted plants. Check everything very carefully. If suspicious, wash root systems at home. [added note: Filter water with fine sieve to catch all solids. Place all solids in sealed plastic bag, place in hot sun for at least 10 minutes, then discard in trash.]

- Avoid plant exchanges or sales.
- Nursery staff should watch for worms by washing sample plant roots.
- Propagate plants yourself from seeds or cuttings
- Do not share potted plants unless you are certain there are no jumping worms or wash the roots before planting. [see note above, 1st prevention tip, on filtering water, discarding all solids safely.]
- Make your own compost.
- Avoid purchasing compost unless the seller can prove that the compost has been heat-treated between 105°F and 131°F (40-55°C) for at least three days and there was no opportunity for trapped worms to flee to cooler areas of a compost pile during treatment.
- Avoid purchasing mulch unless similar precautions have been taken.
- Pay attention when bringing soil onto property. Worms, particularly juveniles and/or cocoons, can be carried in. [added note: equipment, tires, shoes free of soil before entering or leaving property]
- Do not buy worms for fish bait or vermicomposting unless you are certain there are not jumping worms. Many outlets have composting worm cultures that are contaminated with jumping worms. Do not buy on the internet.
- Do not discard unused bait-worms on the ground or in water following fishing.
- Do not move dead wood or wood mulch. Worms have been found under the bark of dead trees.
- Do not use jumping worms as fish bait in remote natural habitats. They do not stay on the hook and fish don't like them.
- Do not dump infested yard waste in natural areas.

Control Currently, there are no well-established proven methods for control or pesticides registered for use against jumping worms. Control of jumping worms is a relatively new area of research. Due diligence to prevent spread is your best control method. Jumping worms are spread in soil, mulch, compost, and yard waste, along waterways through sport fishing as fish bait, and by building and landscaping vehicles, tools, and tire and boot treads.

Indicators of Jumping worms The worms themselves will be highly active and whip, jump, and thrash in snake-like movements when disturbed. Some will break off their tails to avoid predators. They favor leaf litter and/or mulch. Distinctive large globular dark castings (feces) uniformly covering the ground. Unexplained loss of garden plantings or understory plants and young trees in forests.

Mustard Testing for and partial control can be achieved using mustard. Mix ⅓ cup of ground yellow mustard seed into 1 gallon of water and pour half of the liquid slowly over a 1 square foot of soil you want to test. It irritates the worms and they will surface. Hand pick the worms and drown in a bucket of soapy water or bag, place in the hot sun for 10 minutes, and discard in the trash. Do not throw what you think of as dead worms back onto the property. Some may be stunned, recover, and continue to reproduce. The mustard will not harm plants. [added note: this does not test for jumping worm cocoons/eggs]

See Connecticut Agricultural Experiment Station Fact Sheets on jumping worms for much more info